

## **AMENDMENTS TO THE CLAIMS:**

This listing will replace all prior versions of claims in the above-referenced application.

### **Listing of Claims:**

1. (Currently Amended) An LCD control unit for driving an LCD panel in an LCD device, said

LCD control unit comprising:

a signal controller for generating a voltage address signal and a polarity control signal;

a voltage generator block for generating a plurality of (n)  $\gamma$ -voltage levels and a plurality of (m) Vcom-voltage levels ~~based on said voltage address signal,~~

a voltage selecting block for selecting a specified number of said  $\gamma$ -voltage levels and one of said Vcom-voltage levels based on said polarity control signal to output said specified number of  $\gamma$ -correction voltages and a Vcom voltage, wherein output of said voltage selecting block is selected from said plurality of (n)  $\gamma$ -voltage levels and said plurality of (m) Vcom-voltage levels according to a value of said voltage address signal; ~~said voltage selecting block includes~~

an impedance converter, coupled to said output of said voltage selecting block to convert ~~that converts~~ internal impedances of the  $\gamma$ -voltage levels and the Vcom-voltage levels and ~~generates~~ generate said specified number of said  $\gamma$ -correction voltages and said Vcom voltage according to a value of said polarity signal; and

an LCD driver for generating a set of display data signals based on a set of external data signals, wherein said LCD driver receives said specified number of said  $\gamma$ -correction voltages output from said voltage selecting block and includes a  $\gamma$ -correction section for correcting voltages of said display data signals based on said specified number of said  $\gamma$ -correction voltages.

2. (Original) The LCD control unit as defined in claim 1, wherein said voltage address signal and said polarity control signal are generated based on a software as time series signals.
3. (Previously Presented) The LCD control unit as defined in claim 1, wherein said voltage generator block includes a resistor string for generating  $n \times L$  voltage levels,  $n$  first decoders for selecting said  $n$   $\gamma$ -voltage levels from said  $n \times L$  voltage levels based on said voltage address signal, and  $m$  second decoders for selecting said  $m$  Vcom-voltage levels from said  $n \times L$  voltage levels based on said voltage address signal, given number  $L$  being an integer.
4. (Original) The LCD control unit as defined in claim 1, wherein said specified number of  $\gamma$ -correction voltages are a pair of  $\gamma$ -correction voltages.
5. (Original) The LCD control unit as defined in claim 4, wherein said voltage selecting block alternately selects said pair of  $\gamma$ -correction voltages having a positive polarity and said pair of  $\gamma$ -correction voltages having a negative polarity, with respect to said Vcom voltages.
6. (Original) The LCD control unit as defined in claim 1, wherein said voltage generator block includes a resistor string for generating a plurality of voltage levels, a decoder for decoding said voltage address signal, and a selector for selecting one of said  $\gamma$ -voltage levels or one of said Vcom voltage levels.

7. (Original) The LCD control unit as defined in claim 1, wherein said LCD control unit is a one-chip IC.

Claims 8 - 11 (Cancelled)

12. (New) A display control unit for driving a display panel in a display device, said display control unit comprising:

- a signal controller for generating a voltage address signal and a polarity control signal;
- a voltage generator block for generating a plurality of (n)  $\gamma$ -voltage levels and a plurality of (m) Vcom-voltage levels;

- a voltage selecting block coupled to said voltage generator block, wherein an output of said voltage selecting block is selected from said plurality of (n)  $\gamma$ -voltage levels and said plurality of (m) Vcom-voltage levels according to a value of said voltage address signal;

- an impedance converter coupled to said output of said voltage selecting block to convert internal impedances of the  $\gamma$ -voltage levels and the Vcom-voltage levels and generate a specified number of  $\gamma$ -correction voltages and one of said Vcom-voltages according to a value of said polarity signal; and

- a display driver for generating a set of display data signals based on a set of external data signals, wherein said display driver receives said specified number of said  $\gamma$ -correction voltages output from said impedance converter and includes a  $\gamma$ -correction section for correcting voltages of said display data signals based on said specified number of said  $\gamma$ -correction voltages.

13. (New) The display control unit as defined in claim 12, wherein said  $\gamma$ -correction section generates a plurality of voltages based on said specified number of said  $\gamma$ -correction voltages, and said voltages of display data signals are selected from said plurality of voltages based on said set of external data signals.